Nuclear pore as bulk cooling or warming analogy

New eipgenetics technologies and drugs that effect the brain could be highly beneficial, epigenetic markers differ according to tissue type though, with a cheek swab being perhaps 7osomething% similar to the epigenetics of body organs. Getting the a way of reading the epigenetics of brain tissue it is possible neuron tissue outside the brain is similar. One possibility, is that at a dry tongue, something like surgical adhesive tape is applied and rapidly peeled off an anesthetized tongue, tearing away hundreds or thousands of taste bud nerve (neuron) receptors, these taste buds could be compared to brain neurons as to similarity of epigenetic marks.

Another source of neurons for epigenetic similarity matching and prediction of brain neurons is doing needle aspiration of the neurons of the GI tract mesentary. A needle aspiration of mesenteric tissues would be done, and some nerve tissue would be collected along with the other tissues at a 1 mg sample, perhaps taken with a mechanism I have seen that opens angled gripper fingers at a picking and placing gems, the flex distal tip tissue grabber, at the tip of the needle grabs a nerve rich sample (optimal mesentary layer) of mesentary then the actual nerve tissue separated out for epigenetic characterization. (there are kits that do epigenome characterization during 2020), access to mesentery 1 mg sample from needle gem gripper at belly button precludes visible scar,

It is also possible that a new very hydrated skin protocol tear off adhesive strip could collect cytes for epigenetic characterization, or also a proteolytic protocol that utilizes a proteolytic chemical or enzyme (similar to keratin dossolving thioglycollic Nair depilatory cream, or better, notably a proteolytic enzyme that works on just the right proteins, not just keratin) as part of an adhesive strip that automatically plucks out hairs, the gel on the adhesive base (chemical prep) the proteolytic enzymes or chemicals could cause it that when plucking out a hair includes more of the hair’s minute blood vessel, and perhaps sometimes there is a in-hair follicle hair nerve that accompanies the hair at the adhesive strip also doing hair plucking then the nerve cytes grabbed at a chemically optimized hair follicle tear off

adhesive strip are a source of neurons to characterize neuron epigenetics with and mathematically link to the actual epigenetics of neurons at the brain

Another approach to finding epigenetic tissue samples is the blood sample. I have read that fetal cytes circulate at maternal blood and are separable and DNA sequenceable, so it seems likely free-floating cytes of a person's own internal organs and tissues are likely to be at the blood, Hepatocytes seem likely to be able to be large volume and findable and filter from a blood sample for epigenetic characterization purposes, as are myocytes, there is a minute chance that there are concentratable free-floating brain neurons in blood, which would benefit getting a sample

of neurons for epigenetic characterization of beneficial changes to neural epigenetics

Getting tissue samples for epigenetic characterization with ultrasound; It is possible that at non-neuronal tissues, ultrasonic pureeing of deep organ tissue at 1-50 micrometer tissue volume could be possible. If so, then ultrasound might be used to cause a million times more cytes from a particular organ or tissue to be circulating at the blood for blood sampling and to get an epigenetic sample for characterization, say acetylating (heightening activity of) the Klotho gene at the kidney where it is produced increases lifespan more than 20%, a 1-50 micrometer voxel ultrasound zapping of, at the kidney, a bubble or contrast agent microsphere optimized ultrasound -for-pureeing

tissue next to it structure, that zap pureeing of the 1-50 mincrometers of organ tissue then puts lots of kidney cytes at the blood, which then becomes part of a blood sample, although of course they could just measure the increase in circulating klotho protein from the epigenetic change to kidney tissues from a Klotho epigeneticic longevity drug. At 2020 the visual pixel or voxel size of imaging ultrasound with focus agent (bubbles) is 1 micrometer, “By localization of individual injected microbubbles and tracking of their displacement with a subwavelength resolution, vascular and velocity maps can be produced at the scale of the micrometer”, and “These techniques are now being applied pre-clinically and clinically for imaging of the microvasculature of the brain, kidney, skin, tumors and lymph nodes”(2020),

I think that if you ultrasonically zap only things that are contrast enhancement bubbles or spheres, have them be less than 1/0th of the ultrasound scan field, the contrast agent microspheres could be be wiggleable tissue pureeing abrasives, possibly with chemical coatings or moieties on them; along with of course the ability of ultrasound on its own to puree tissue, one possibility for an abrasive microsphere ultrasound contrast agent findable contrast agent sphere is some variety of keratin sphere coated or moeityized with a detergent like bile chemicals, which the body likely metabolizes even if it shows up at the ciculatory system, another physiologically harmless ultrasound vibrateable ultrasound contrast microsphere could be very high molecular weight starch that would typically take 24 hours to puff

up in water, perhaps coated with or moietized with bile chemicals that are detergents to do an even better job of wiggle-pureeing 1 micrometer of organ tissue

When causing cytes to be circulating and available at the bloodstream for blood sampling there is a completely different “large thumping speaker” approach to using sound to put organ tissue cytes at the circulatory system prior to a blood sample, such as a blood sample taken to characterize epigenetics, that is to use wide area 3D ultrasound or even 3d shaped infrasound at say an entire kidney, or an entire little toe joint, a femus for bone marrow characterization, adipose tissue, or some multicentimeter planar acoustic focus that actually addresses planes of skin dermatocyctes thus putting

dermatocyctes at the circulation for sampling, It is even posible the mobilization of cytes to the blood stream for sampling with big ultrasound (or even infrasound) could be used on the heart, notably focusing on just parts of it, notably acoustic focus on the heartstrings as they are called may provide accurate heart epigenetics at a test-risk-minimized tissue. At wide area tissue or organ thumping, acoustically thump the whole thing several thousand times a second for seconds to minutes prior to taking the blood sample. This might work better than actual pureeing of minute amounts of organ tissue with ultrasound

Also solitons at ultrasound could heighten energy transfer (such as to contrast agent microspheres) through

tissue to make for better resolution and micropureeing strength of ultrasound

Noting the value of making epigenetic tissue sampling, and epigenetic tissue characterization particularly affordable, it is possible that the cheek swab which is 70something% similiar to organ epigenetics, could simply have something very simple, like a three stroke, same location protocol, and the cheek swab could contain gentle toothpaste intensity abrasives causing more actual tissue cytes, past the mucous secreting cyte layer to be gathered; also it is possible a toothpaste-intensity abrasive could be part of a three swab passes on a region of the gums technique which actually gathers a completely different kind of tissue sample than cheek epithelium, both together might have

higher overlap of the rest of the body’s epigenome

It is possible a cheek swab that uses a laser to drill into tissue could be less than 40 cents per item, at aibaba.com battery powered laser pointers are 10 to 29 cents each, diffraction gratings and hologram tip attachments for laser pointers are well known, one of these diffractors could do a mesh of hyperconcentrated laser light, and an electronic circuit could pulse the output of the laser pointer to make a laser swab that digs holes in tissue, gathering a better tissue sample, notably for epigenetic characterization

epigenetics of adipocyctes, I think there are epigenetics of being more svelte, and possibly an epigenetics of absence of SASP products and the kinds of chemicals (negative

chemicals) produced at sensescent cytes, so a an epigenetic drug could downward express the same kind of chemicals that a longevity senolytic gets rid of. This would be an epigenetic longevity drug

The most effective senolytic at increasing lifespan could be function duplicated (downregulation of SASP products) as an epigenetic drug, but be absent medical supervision, and be as affordable as the most affordable location-specific epigenetic modifying technology

Use cell penetrating peptides, CPP, and other cell membrane passing moieties attached to the molecules in herbs, fungi, and other natural product drugs and medicines to make higher dose poetncy drugs, as well as beneficially modifying epigenetics;

multiply the effectiveness of scientific method measurable as having actual function, medical herbs, and notably, CPPs heigtening the effect of herbs and other natural products at beneficially modifying epigenetics at higher dose potency, causing herbal and natural product modification of epigenetics to be 10,100, over 390 times more powerful. (efficiency will likely go up, but wikipedia says, “Multimers of TAT have been found to increase transfection efficiency of plasmid DNA by 6-8 times more than poly-L-arginine or mutant TAT2-M1, and by 390 times compared with the standard vectors.[51] “ There are peptides that cause the things they are connected to to be preferentially transported across the cytomemebrane, CPP, Attaching these cell penetrating peptide transport peptides CPP (or other

moeities) to the organic chemicals in herbs and other natural products causes the herb dose multiplier to be hundreds of times higher; at a dose-multiplied herbal, fungal or toher natural product, bulk attaching everything in a herb to a CPP is possible, wikipedia notes as to methods, I did not know mcuh so I thought a condensation reaction could connect herbal chemcial ingredients anywhere there was an -OH on the herbal or fungal chemical could attach to the CPP, with a condensation reaction some lipid membrane conponent thing could be bulk attached to every lipid at an herb

Notably a membrane transport moiety or cell penetrating peptide CPP attached to herbal chemicals (actual individual CPP-molecule chemicals) **makes entirely new natural**

products and herbal medicines possible because new things are affordable. Previously something like a saffron product that strongly benefits vision was near $34/30 doses but with a 300-400 times dose multiplier this would just be 9 cents per 30 doses, also there could be herbs and fungi people have not yet noticed, that actually work, that due to their natural concentration's dose per milligram being less than than physiologically effecting, which when attached to a membrane transport peptide, CPP or moeity, actually do enough of a thing, to be a new drug. (390 times multiplier makes a drug) So membrane transport peptides could turn new herbal and fungal natural drugs into measurably effective drugs some of the time, increasing the number of drugs available, if there were any that were

expensive they get 390 times more affordable with CPPS

There are both covalent bond approaches to connecting all the chemicals in an herb or fungi to a CPP; as to how the membrane passing peptide (CPP, cell penetrating peptide) actually gets connected to the chemicals in the herbal or natural product, wikipedia says, “Most CPP-nucleic acid complexes that have been proposed so far are formed through covalent bonding. A range of CPP-nucleic acid complexes have been synthesized through different chemistries that are either stable or cleavable linkages. And the most widely used method in publication is cleavable disulfide linkages through total stepwise solid-phase synthesis or solution-phase or solid-phase fragment coupling.[31] Some other

strategies like stable amide, thiazolidine, oxime and hydrazine linkage have also been developed.[32] However, those covalent linking methods are limited by the concern that the synthetic covalent bond between CPP and nucleic acid may alter the biological activity of the latter.[33] Thus, a new non-covalent strategy requiring no chemical modification with short amphipathic CPPs, like MPG and Pep-1 as carriers has been successfully applied for delivery of cargoes.[34][35] These non-covalent conjugates are formed through either electrostatic or hydrophobic interactions. With this method, cargoes such as nucleic acids and proteins could be efficiently delivered while maintaining full biological activity."

Notably LSD with a CPP attached

would likely come on much faster; also there are likely moderate CPPs around 200, which work at the brain, but not the other organs and body tissues, causing the vast majority of LSD to go to the brain and not the rest of the body as it rapidly gathers it up from the bloodstream, at 3% of brain weight LSD could be 33 times more dose potent, at MDMA having preferential uptake at the brain could also make it 33 times cheaper Yay Reed College!

Longevity technology, LKM512 yogurt is published as causing mice to live 90% longer. It is possible this effect is from chemicals made at the yogurt, although there are other possibilities, growing LKM512 yogurt, lyophilizing it, and chemically attaching it (unless non-covalent approach is to CPP is used) to a CPP makes a new longevity

drug that passes the cell membrane with as much as 390 times dose amplification. **If the yogurt was $1/day then the equivalent chemicals delivered with CPP is about 1 cent a day for 90% greater lifespan (published at mice)**

epigenetics of resistance to ischemia as lifesaving, except where deleteterious, standard epigenetics installed in people over 60, if 3-40% more resistant to ischemia then much risk from cardiovascular disease is reduced, this is also a disease or “fade” resistance pill, sort of, at mild ischemia the risk-reduced hearts avoid growing “dead patches”, and what are described as subacute “mini-strokes” might be absent degrading cognition, these epigenetics could

improve the prognosis of any low blood oxygen illness, including COPD/lung cancer , some subset of the epigenetics of naked mole rats, which live with hypoxia, could be an epigenetics of reducing ischemia, another possible epigenetics of resistance to ischemia could be found at tissue culture: first expose tissue culture to epigenetic randomization (chemicals), then make a billion cells (neurons, cardiomyocytes) at a tissue culture, have them grow more GFP the longer they live, expose them to ischemia, culture another period that is double the original culture growth period) the ones at flow cytometry that are double green are the still living cytes, with the discenable epigenetics of resistance to ischemia

find well normal people with different

mixes of sleep stages, then consider what is (constitutes) optimizing those sleep stages, like making more (higher percentage as a fraction of all sleep) dream and deep dreamless regenerative sleep(“deep sleep” or otherwise, the repair part) less of the other types, find people that naturally have that, and if it is authentically beneficial, then see if it is genetic, also find the epigenetics of optimized amount of combined ensemble (hieghtened fraction) of dream and deep healing sleep, monozygotic twin studies on high dreaming fraction and high regenerative sleep fraction find the epigenetics; find a monozygotic twin where the dreaming or also regenerative fraction of sleep is much higher compared to their monozygotic twin (say 95th percentile of dreaming and regenerating compared with median or below median), then find

their epigenetics. This matter enough so that finding the MZ twins with the difference, perhaps among the elderly, then waiting to autopsy their brains so as to get the epigenetics of neurons has value. An immediate effort could be made with cheek swabs and epigenetic samples gathered from blood and ultrasound techniques

synthetic RNA drugs could, obviously, use structide RNAs, that are hyper durable, but what have others alreay published on durable rna drugs

During the year 2020 AD there was work. People would get jobs and careers and then do them. A technology that could benefit that (Noting the MBTI, P (spontaneoues, perceving) type, and the 50% of people who are below median on Big 5

conscientiousness) Is just to be able to either hold up a sign that says looking for work, upload an image of the sign to social media and then have web search agents seek the person out and scan their social media posts for things software, like deep learning AI finds associated with above median work performance/employer satisfaction so there is a reason to offer the person voluntary work. Another way is for the person seeking work go to “Imlookingforwork.com” and upload anything, the emphasis is that they really can upload anything at all and that the recruiters software improved (deep learning AI) to parse it. If you dare to put up poetry or images of your garden that might work. The Imlookingforwork.com site would obviously tend to work better if you uploaded a CV or something shorter, but could work if you just

uploaded a photo.

schwann cells/ranvier nodes, genetics of schwann cells and cognition, there could be g (like) IQ allele gene variations at schwann cells (myelin sheath cells)

10th 50th, and 99th percentile of human cyctes morphology genetics at human -> rat neurons/glia/schwann cytes, things like radius, or =), =], =\ morphology schwann then see which rats are smarter than others, find the genes that do the the thing at human as g like IQ genes

I think there may be an **epigenetics of beauty** that when present throughout puberty causes beautiful development; Breast size and shape there are estrogen receptors, and I read progesterone receptors effect

breast shape photoacetylate the genes of estrogen reception at a 3D contour to optimize breasts size and shape; height, there are published height genes, acetylation would cause greater height; clear skin there may be sebum secretetion/acne genes, these can be adjusted very locaclly, rather than over the entire body with photoactivated epigenetic modification systems (a modified version of cas9 optogenetics is one) photomethylate or phototrimethylate the sebum production genes at the surface of the body with light, it is also possible to methylate or trimethylate (decrease the activity of) melanin production genes giving people paler skin, I think pale white skin is beautiful so I would give that to my children. Also, that would be an epigenetic modification to be pale skinned all over the entire body;

a cosmetic asethetician could make computer maps of future possible faces for a 9 year old, based on amplifying or decreasing bone growth receptor activation at the face, then based on the computer image the 10 year old likes the most, a network of lines of light could be cast upon their face to upregulate and downregulate (photomethylate, photoacetylate) epigenetically supported bone growth and shape change genes like those that respond to growth homones and others, I think neoteny is part of beauty, so a finer featured more childlike face may be more beautiful; there may be genes associated with getting stretch marks, these could be methylated or trimethylated (activity decreased); at the breasts the genes at connective tissue could be under epigenetic control as to how much connective tissue there is and its

diameter, using a photonic epigenetic editing system to do area localization, acetylating (upregulating, increasing) connective tissue growth could cause cause connective tisuue epigenetics to upregugulate, but ony at the illuminated parts of the breasts at the whole body creating sagless breasts (and sagless anything else, perhaps upper arm area the person wanted to block chronologically cumulative sagging at); Laser or UV activation of the photoactive drugs that adjust the epigenetics of eye color contributes to choice of eye color, People might want to choose the shape of bottom they have as developing tweens and teens, using light to modify bone growth vector velocity at the hips and the shape of the bottom, this could be done on annual visits at 10 years, 11, 12, 13, 14 for light based hip bone growth vector adjustments to keep on

course until fully developed, so people can have the shape of bottom they pick from a computer screen,
All of the epigenetics of beauty are beneficial to make into a genetics of beauty and placed at the human germline

When going for photoactive beautification epigenetics treatment is also a beneficial time to remove moles with lasers

Enhancing genitals for female pleasure; at boys of about 5 years of age or younger, possibly at babies, photoactivated epigenetic editing of growth hormone receptor genes, or other genes (EGF?) associated with penis size could edit epigenetics so that a 8” erect penis length and 6” erect penis girth at the developed adult penis from photoactivated

epigenetic modifications of the penile tissue as a baby. It is possible that an oral epigenetic adjustment drug, and a 2 hour experience of a lit up diaper is sufficient to change the epigenetics of the penis to grow to 8” erect length and 6” girth as as a preteen and teen

At girls 5 years of age or younger, and possibly girl babies, photomodulation of epigenetic marker modifying drugs could cause doubled or tripled number of pleasure receptor nerves at the clitoris and much larger crura, deep clitoral process, and doubled clitoris glans and shaft size to about 8 mm from 4 mm, or 16 mm from 8 mm after the girl goes through puberty contributing to her sexual pleasure as a teen and adult. Having this done as a baby likely goes with an oral epigenetic editing drug and a light emitting C shape that cups the

vagina, something like a C string bikini with lasers in it to reach the crura

At adults, photoactivateable epigenetic drugs could sculpt the body, and effect adipose tissue as the person preferrred

The epigenetics of telomerase could be longevity epigenetics, the epigenetics of the number of mitochondria could be epigenetics of energeticness, and a kind of youthfulness, compare what NMN does

Making a beneficial sex drug, paleness bremelanotide, part of the human germline; paleness bremolantide is an amino acid variant version of bremolantide that has sexual arousal characteristics while blocking the

melanin-producing receptors that regular bremelanotide works on, attaching paleness bremelantotide to a cell passing peptide (CPP) makes it active up to 390 times (CPP velocity) faster, genetically engineering the glands that make vaginal lubricant to make a variety of paleness bremelanotide CPP amino acid polymer that is enzymatically divided by the proteolytic enzymes in saliva produces paleness bremelantotide-CPP that is cleaved to active paleness bremelantotide-CPP units and absobed through vaginal tissues and absorbed through the mouth and cheeks (buccally) when people perform cunnilingus, a woman or girl masturbating without saliva would produce the minimally active polymer form, but if she masturbated with saliva she would become further sexually aroused, with one application

of saliva to the vagina sufficient to proteolytically availablize 4 erotically stimulating doses of paleness bremelanotide-CPP absorbable through vaginal tissue

In men, the glands that produce semen would also produce the paleness bremelantotide-CPP amino acid polymer, such that a 30th percentile volume ejaculation had 4 doses of paleness bremelantotide-CPP, if placed in the mouth and swished around with saliva, this would improve fellatio as functional foreplay, with the fellatio practicioner, such as a woman, girl, or man swishing the ejaculate around in their mouth if they wished to be further aroused and even returning it to the mouth of the person who ejaculated so they would become aroused again sooner.

paleness bremelantotide-CPP absorbed from cunnilingus would also cause erections, “**bremelanotide** is also erectogenic in male rats” contributing to sexual well being and optimally making cunnilingus that generates paleness bremelanotide-CPP a larger part of foreplay

It is possible paleness bremelantotide-CPP causes sufficient after orgasm sexual arousal to bridge the refractory period so that that more people have voluntary second and third rounds of sex and orgasms, or more

at women and girls paleness bremelanotide-CPP could be made both by vaginal tissue and lactobacillus vaginal flora so masturbation with saliva or cunnilingus would activate a two person dose of 1.5 strength doses

each

a better receptor activating peptide for the melancortin receptor may be found that can be made by the human body, that improved peptide, which would cause paleness or not effect on skin color would be used

20 mg nasal spray, 24 hours effect at women
sweetness peptides

genetics of 99.9th percentile size of healthy prostate